

## REMARKS

In the Office Action mailed March 31, 2003, the Examiner rejected pending elected claims 1-8. The present amendment cancels claims 1-7 without disclaimer or prejudice to the filing of one or more continuation or divisional applications directed to the subject matter of these claims, and adds new claims 9-12. As a result, claims 8-12 remain pending in the present application (1 independent claim, 4 claims total). No new matter has been added by this Amendment. Reconsideration is respectfully requested in light of the following Remarks.

### A. Claim Rejections -- 35 U.S.C. § 102

Claims 1, 2, and 5 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,422,435A, issued to Takiar et al. (the "Takiar reference"), and also stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,376,904, issued to Haba et al. (the "Haba reference"). These rejections are respectfully traversed. Neither of these references disclose, suggest, or teach each and every element of independent claims 1, 2, and 5. Nevertheless, as these claims have been cancelled without disclaimer, these rejections have been rendered moot.

### B. Claim Rejections -- 35 U.S.C. § 103

Claims 3, 4, and 6-8 stand variously rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takiar reference in view of U.S. Patent No. 5,677,576 (the "Akagawa reference") and the Haba reference in view of the Akagawa reference.

With respect to claims 3, 4, 6, and 7, which have been cancelled without prejudice, this rejection is rendered moot. With respect to claim 8 as amended and the various dependent claims depending therefrom, this rejection is respectfully traversed.

None of the cited references include each and every element of the claims as amended. For example, none of the references disclose an interposer configured such that the "conductive trace lies at least partially underneath said second semiconductor device" and connects pads "both lying outside a perimeter of the first semiconductor device" as recited in claim 8 as amended.

That is, referring to Fig. 4 of the present application, the use of passivation on the top of the conductive traces allows a die 208 to be configured (in size and/or position) such that it lies directly above one or more conductive traces (e.g., the conductive trace leading from pads 402). Neither the Haba nor the Takiar references discloses the use of passivation in this way, because they do not contemplate connecting pads on various sides of an overlying device using a conductive trace that runs underneath that device. See, for example, Fig. 15 of Takiar, and Fig. 4A of Haba. Figs. 10 and 11 of Haba disclose conductive traces leading between a periphery of the substrate and the middle of the substrate, but not between pads at outside the perimeter of the die positioned on top of substrate 1000.

The Akagawa reference discloses a type of chip-sized semiconductor that uses a passivation layer, but the purpose of the passivation layer of Akagawa is unrelated to allowing a die to be placed on top of an interposer, as claimed in the present application.

Accordingly, no combination of the cited references would include each and every element of the claims as amended. Furthermore, there is no suggestion to combine the teaching of Akagawa (which, while involving semiconductor devices, does not deal with interposers) with

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that of Haba and Takiar. Applicants therefore request that the Section 103 rejections be withdrawn.

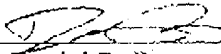
**C. Conclusion**

In view of the above remarks, Applicants respectfully submitted that the foregoing remarks fully address the Examiner's objections, and that all of the pending claims comply with 35 U.S.C. § 112, are patentable over the art of record, and are in condition for allowance.

A Notice of Allowance respecting all pending claims is earnestly solicited. Should the Examiner wish to discuss any of the above in greater detail, then the Examiner is invited to telephone the undersigned at the Examiner's convenience.

Respectfully submitted,

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